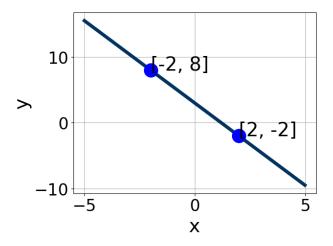
Progress Quiz 1 Version B

1. Write the equation of the line in the graph below in Standard Form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A.  $A \in [4, 7], B \in [-3.08, -1.52], \text{ and } C \in [-7.9, -5.6]$
- B.  $A \in [-8, 1], B \in [-3.08, -1.52], \text{ and } C \in [-7.9, -5.6]$
- C.  $A \in [-1.5, 4.5], B \in [-0.21, 1.61], \text{ and } C \in [1.6, 5.1]$
- D.  $A \in [4, 7], B \in [1.83, 2.1], \text{ and } C \in [5.1, 9.2]$
- E.  $A \in [-1.5, 4.5], B \in [-1.55, -0.71], \text{ and } C \in [-3.7, -1.5]$

2. Find the equation of the line described below. Write the linear equation in the form y = mx + b and choose the intervals that contain m and b.

Parallel to 8x - 7y = 13 and passing through the point (-7, 7).

- A.  $m \in [0.96, 1.48]$   $b \in [13.02, 14.67]$
- B.  $m \in [-1.2, -0.85]$   $b \in [-1.17, -0.99]$
- C.  $m \in [0.96, 1.48]$   $b \in [-15.32, -14.66]$
- D.  $m \in [0.74, 1.11]$   $b \in [14.79, 15.09]$
- E.  $m \in [0.96, 1.48]$   $b \in [14.79, 15.09]$

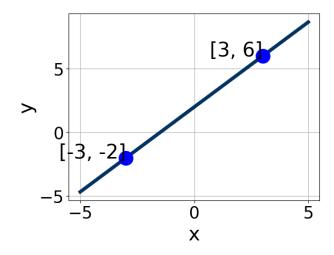
3. Solve the linear equation below. Then, choose the interval that contains

Progress Quiz 1

the solution.

$$\frac{-6x+7}{2} - \frac{-5x+7}{6} = \frac{-7x+3}{8}$$

- A.  $x \in [-0.6, 0.5]$
- B.  $x \in [0.4, 3.3]$
- C.  $x \in [-4.2, -1.8]$
- D.  $x \in [1.6, 4]$
- E. There are no real solutions.
- 4. Write the equation of the line in the graph below in Standard Form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A.  $A \in [-2.1, -1.2], B \in [-2.7, -0.4], \text{ and } C \in [-2.1, -0.5]$
- B.  $A \in [2.6, 7.1], B \in [2.5, 5.2], \text{ and } C \in [4.8, 9.5]$
- C.  $A \in [-2.1, -1.2], B \in [0.5, 1.4], \text{ and } C \in [-0.1, 2.9]$
- D.  $A \in [2.6, 7.1], B \in [-3.2, -2.6], \text{ and } C \in [-7.8, -4]$
- E.  $A \in [-4.9, -3.5], B \in [2.5, 5.2], \text{ and } C \in [4.8, 9.5]$
- 5. Find the equation of the line described below. Write the linear equation in the form y = mx + b and choose the intervals that contain m and b.

Parallel to 7x - 5y = 7 and passing through the point (7, -4).

Progress Quiz 1

A. 
$$m \in [0.83, 2.03]$$
  $b \in [12.9, 16.6]$ 

B. 
$$m \in [-2.1, -1.18]$$
  $b \in [5.4, 7.1]$ 

C. 
$$m \in [0.59, 0.78]$$
  $b \in [-15.3, -13.5]$ 

D. 
$$m \in [0.83, 2.03]$$
  $b \in [-15.3, -13.5]$ 

E. 
$$m \in [0.83, 2.03]$$
  $b \in [-11.2, -10.6]$ 

6. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{3x+4}{3} - \frac{-7x-7}{5} = \frac{5x-9}{2}$$

A. 
$$x \in [44.33, 46.33]$$

B. 
$$x \in [-4.45, -0.45]$$

C. 
$$x \in [67.33, 78.33]$$

D. 
$$x \in [197, 204]$$

- E. There are no real solutions.
- 7. First, find the equation of the line containing the two points below. Then, write the equation in the form y = mx + b and choose the intervals that contain m and b.

$$(-2, -10)$$
 and  $(-9, 11)$ 

A. 
$$m \in [2, 12]$$
  $b \in [33, 41]$ 

B. 
$$m \in [-6, -2]$$
  $b \in [10, 17]$ 

C. 
$$m \in [-6, -2]$$
  $b \in [-20, -9]$ 

D. 
$$m \in [-6, -2]$$
  $b \in [-8, -6]$ 

E. 
$$m \in [-6, -2]$$
  $b \in [19, 23]$ 

8. Solve the equation below. Then, choose the interval that contains the solution.

$$-2(-8x+12) = -5(-18x-16)$$

- A.  $x \in [-1.56, -1.34]$
- B.  $x \in [-1.1, -0.59]$
- C.  $x \in [0.61, 1.06]$
- D.  $x \in [-0.75, -0.25]$
- E. There are no real solutions.
- 9. First, find the equation of the line containing the two points below. Then, write the equation in the form y = mx + b and choose the intervals that contain m and b.

$$(7, -6)$$
 and  $(10, -5)$ 

- A.  $m \in [0.19, 0.59]$   $b \in [-9.5, -7.3]$
- B.  $m \in [0.19, 0.59]$   $b \in [-14.2, -12.1]$
- C.  $m \in [0.19, 0.59]$   $b \in [6.3, 9.3]$
- D.  $m \in [0.19, 0.59]$   $b \in [-16.5, -13.7]$
- E.  $m \in [-0.48, -0.14]$   $b \in [-3, -0.1]$
- 10. Solve the equation below. Then, choose the interval that contains the solution.

$$-5(12x+6) = -2(3x+11)$$

- A.  $x \in [-0.22, 0]$
- B.  $x \in [-1.08, -0.8]$
- C.  $x \in [0.85, 1.13]$
- D.  $x \in [-0.81, -0.78]$
- E. There are no real solutions.